

a1 Claim 66 (Once Amended). The process of claim 65 wherein the olefin(s) [are selected from one of the group consisting of] is 2-methyl-pentene-2.

a2 Claim 81, line 1, between the words "reactor" and "comprising", please insert ---in the presence of a bulky ligand metallocene catalyst system, the process---

Claim 95, line 3, please delete "metallocene-type" and substitute therefor ---metallocene---

a3 Claim 101, line 5, between the words "comonomer" and "having" please insert ---that is not recycled comonomer---

Claim 101, line 6, please delete the words "the alpha-olefin".

#### REMARKS

Applicant respectfully requests reconsideration in view of the above amendments and the following remarks.

Claims 1-110 are pending in this application.

Claims 70-80 and 95-100 have been allowed.

Claims 1-69, 81-94 and 101-110 have been rejected.

Claims 1, 7-10, 15, 20, 29, 32, 40, 42, 50, 55, 60, 65-66, 81, 95 and 101 have been amended.

Claims 1-110 are still in this case.

The Examiner has rejected claims 1-69 and 101-110 under 35 U.S.C. §112, second paragraph, (see below) as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

First, the Examiner has rejected claims 1, 15, 20, 32, 42, 50, 55, 60 and 65 and their dependents as indefinite in the recitation "metallocene-type". Specifically, the Examiner is unclear as to how the word "type" is intended to affect the accepted meaning of the term "metallocene". Applicant has simply used the phrase "metallocene-type" as opposed to "conventional Ziegler-Natta-type" catalysts. However, to facilitate the prosecution, Applicant has deleted the word "type" from claims 1, 15, 20, 29, 32, 40, 50, 55, 60, 65, 95 and 101.

The Examiner has rejected claims 7, 8, 9 and 10 as being indefinite due to lack of clear antecedent basis for the phrase "the at least one olefin" limitation. Applicant has amended these claims 7, 8, 9 and 10 to depend from claim 4, as this was an inadvertent oversight.

The Examiner has rejected claim 55 as to the limiting effect of the term "essentially free" because it is not clear what this term means in terms of permissible amounts of internal, di-and tri-substituted olefins. Applicant respectfully points out that on page 30, lines 21-25 of the specification, the phrase "essentially free" is defined such that one of ordinary skill in the art would understand its meaning.

The Examiner has rejected claim 66 as being confusing Markush language where selection is from a single member. Applicant has accordingly amended claim 66 to correct this confusion.

The Examiner has rejected claim 101 and its dependents as lacking a clear antecedent basis for the phrase "the alpha-olefin" and the uncertainty as to the limiting significance of "fresh". Applicant has amended claim 101 to correct the antecedent basis. The term "fresh" (on page 27, lines 14-19 of the specification) is provided. That is, a

comonomer that has not been used in the polymerization process. To facilitate the prosecution Applicant has amended claim 101 accordingly.

Thus, in view of the above discussion and claim amendments, it is respectfully submitted that all rejections under 35 U.S.C. §112, second paragraph, should be withdrawn.

The Examiner has rejected claims 81-94 under 35 U.S.C. §112, first paragraph, because the bulky ligand transition metal metallocene catalyst system is considered critical or essential to the practice of the invention. Applicant has amended the claims to facilitate the prosecution of these claims. Thus, it is respectfully submitted that this rejection be withdrawn.

The Examiner has rejected claims 55-59 under 35 U.S.C. §102(b) or (e) or anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over any one of EP 0 495 099 A1 (EP '099), U.S. Patent No. 5,621,126 to Canich, et al (U.S. '126), and U.S. Patent No. 5,055,438 to Canich (U.S. '638).

The Examiner states that each of the references show the polymerization of ethylene and propylene comonomer in the presence of a bridged metallocene catalyst compound. Also, the Examiner states that propylene, having only three carbon atoms, does not appear capable of forming such internal olefin isomers, and therefore, the exemplified processes referred to in the above documents are reasonably assumed to be operating "essentially free" of the specified internal olefins.

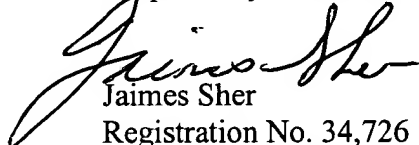
Applicant respectfully disagrees with the Examiner's conclusions for the following reasons. It has been found that in propylene polymerizations 2-methyl-pentene-2 is formed and interferes with this polymerization process. Furthermore, in the case of ethylene/propylene polymerizations, internal olefins are produced due to ethylene and/or propylene oligomerizations. Ethylene oligomerizes into a four, six or eight carbon linear olefin and also into 3-methyl -pentene and -heptene structures, the internal isomers of

which interfere with polymerization; propylene oligomerizes into a six carbon, 2-methyl-pentene structure and/or a nine carbon, 2,4-dimethyl-heptene structure; and, ethylene/propylene can oligomerize to give either a linear five carbon structure or a 2-methyl-butene structure. This oligomerization that takes place results in the formation of the internal olefins that affect polymerization. None of the references either disclose each and every element of the claimed invention, and none of references either alone or in combination make obvious the presently claimed invention. Thus, it is respectfully submitted that this rejection also be withdrawn.

The Examiner has allowed claims 70-80 and 95-100. Also, Applicant has amended the claims to overcome the 35 U.S.C. 112 rejections and therefore these claims are also deemed allowable. Lastly, it is respectfully submitted that the rejection of claims 55-59 has been overcome and that these claims are also in condition for allowance.

Thus, all claims 1-110 should be allowed and a notice of allowance is respectfully solicited. Should the Examiner have any questions or require any additional information please contact the undersigned.

Respectfully submitted,

  
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